

**REMARKS**

Claims 14-20 and 25-31 were pending. Claims 14, 15, 25, and 31 are amended herein. New claims 32-42 are added herein. Support for these amendments is found throughout the application at, *inter alia*, page 5 and in the Examples. Therefore, it is believed that no new matter is added. Claims 14-20 and 25-42 are currently pending. No claim is allowed.

**Rejection Under 35 U.S.C. § 103 (a)**

Claims 14, 15, 17, 19, 20 and 25-27 were rejected under 35 U.S.C. § 103 (a) as allegedly unpatentable over Burner (U.S. Patent No. 6,087,103) in view of Upadhyay et al. (U.S. 5,962,515) for reasons of record. Claims 16, 29, and 30 were rejected under 35 U.S.C. § 103 (a) as allegedly unpatentable over Burner in view of Upadhyay et al. as applied to claims 14, 15, 17, 19, 20 and 25-27 in further view of Baek et al. or Verma et al. for reasons of record. Claims 18 and 28 were rejected under 35 U.S.C. § 103 (a) as allegedly unpatentable over Burner in view of Upadhyay et al. as applied to claims 14, 15, 17, 19, 20 and 25-27 in further view of Kutsuna et al. for reasons of record. Claim 31 was rejected under 35 U.S.C. § 103 (a) as allegedly unpatentable over Burner in view of Upadhyay et al. as applied to claims 14, 15, 17, 19, 20 and 25-27 in further view of Baek et al. or Verma et al., and in further view of Kutsuna et al. for reasons of record. According to the Examiner, the fractions in the claimed invention do not exclude nucleic acid fragments which are separated by gradient centrifugation. The Examiner also asserts that the use of protein libraries or protein extracted from plants as the immobilized targets is not recited in the rejected claims. Applicants traverse these rejections.

Applicants respectfully submit that the cited combination of references fail to render the claimed methods *prima facie* obvious because the references fail to teach or suggest the use of crude plant extract fractions containing multiple protein components to screen for a polypeptide that binds a target. The claimed methods are directed to a method where components in individual fractions are immobilized on the surface of a solid support. *See* the specification at page 5 (“the components in individual fractions are immobilized on the surface of a gridding solid support”). The presence of multiple protein components is also disclosed in the specification in the description of washing away the other unbound proteins. *See id.* (“The unbound protein was stripped off thereafter.”) A

person of skill in the art would recognize from this description and knowledge of the limits of chromatographic separation that each fraction contains multiple protein components. The claims as amended further clarify this point. As acknowledged by the Examiner, Burmer is limited to the use of nucleic acids extracted from plant tissue which is separated by gradient centrifugation. *See* Action dated June 24, 2004 at page 4. Thus, Burmer does not teach or suggest the use of libraries of proteins found within the crude plant extract fractions to screen for biologically active molecules using a labeled target. None of the cited references cure this deficiency in Burmer. Thus, the cited references fail to render the claimed methods *prima facie* obvious.

Likewise, the cited references fail to render the methods of new claims 32-42 obvious. Again, Burmer lacks any teaching or suggestion to use protein libraries in crude plant extracts to screen for biologically active molecules using a labeled target. None of the cited references remedy this deficiency.

Accordingly, it is believed this basis for rejection may be withdrawn.

**CONCLUSION**

In view of the above, each of the presently pending claims in this application is believed to be in immediate condition for allowance. Accordingly, the Examiner is respectfully requested to withdraw the outstanding rejections of the claims and to pass this application to issue. If it is determined that a telephone conference would expedite the prosecution of this application, the Examiner is invited to telephone the undersigned at the number given below.

In the event the U.S. Patent and Trademark office determines that an extension and/or other relief is required, applicant petitions for any required relief including extensions of time and authorizes the Commissioner to charge the cost of such petitions and/or other fees due in connection with the filing of this document to **Deposit Account No. 03-1952** referencing docket no. 205032000400. However, the Commissioner is not authorized to charge the cost of the issue fee to the Deposit Account.

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Respectfully submitted,

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